

ABSTRACT OF THE DISCLOSURE

A die set for press forming a metal sheet is provided, which comprises: at least a punch; and a die, wherein a punch-die clearance CL2 corresponding to a site to be formed immediately after the initial stage of press forming and a punch-die clearance CL1 corresponding to a site to be formed in the initial stage of press forming are set so as to satisfy the following expressions (1) and (2), respectively:

$$0.8 \times t \leq CL1 \leq 1.2 \times t \quad \dots \quad (1)$$

$$CL2 \geq CL1 + t \quad \dots \quad (2)$$

where t denotes the thickness of the metal sheet to be formed. This configuration implements a die set for press forming capable of stably generating the reverse bending deformed portion due to overrun even when the die radius is large, minimizing the phenomenon such as wall warp, and enhancing the dimensional accuracy in press forming of a metal sheet, and a press forming method using the die set.